



**United States  
Environmental Protection Agency**

**FISCAL YEAR 2023**

**Justification of Appropriation  
Estimates for the Committee  
on Appropriations**

**Tab 10: Inland Oil Spill Programs**

**EPA-190-R-22-001**

**April 2022  
[www.epa.gov/cj](http://www.epa.gov/cj)**

**Environmental Protection Agency  
FY 2023 Annual Performance Plan and Congressional Justification**

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**Environmental Protection Agency  
FY 2023 Annual Performance Plan and Congressional Justification**

**APPROPRIATION: Inland Oil Spill Programs  
Resource Summary Table  
(Dollars in Thousands)**

	<b>FY 2021 Final Actuals</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 President's Budget</b>	<b>FY 2023 President's Budget v. FY 2022 Annualized CR</b>
<b>Inland Oil Spill Programs</b>				
Budget Authority	\$19,601	\$20,098	\$26,502	\$6,404
Total Workyears	78.2	84.8	99.8	15.0

**Bill Language: Inland Oil Spill Programs**

*For expenses necessary to carry out the Environmental Protection Agency's responsibilities under the Oil Pollution Act of 1990, including hire, maintenance, and operation of aircraft, \$26,502,000, to be derived from the Oil Spill Liability trust fund, to remain available until expended.*

*Note — A full-year 2022 appropriation for this account was not enacted at the time the Budget was prepared; therefore, the Budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of Public Law 117-43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.*

**Program Projects in Inland Oil Spill Programs  
(Dollars in Thousands)**

<b>Program Project</b>	<b>FY 2021 Final Actuals</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 President's Budget</b>	<b>FY 2023 President's Budget v. FY 2022 Annualized CR</b>
Compliance				
Compliance Monitoring	\$132	\$139	\$2,146	\$2,007
Underground Storage Tanks (LUST / UST)				
LUST / UST	\$0	\$0	\$0	\$0
Enforcement				
Civil Enforcement	\$2,532	\$2,413	\$2,538	\$125
Oil				
Oil Spill: Prevention, Preparedness and Response	\$15,160	\$16,200	\$20,503	\$4,303
Operations and Administration				

<b>Program Project</b>	<b>FY 2021 Final Actuals</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 President's Budget</b>	<b>FY 2023 President's Budget v. FY 2022 Annualized CR</b>
Facilities Infrastructure and Operations	\$628	\$682	\$641	-\$41
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	\$1,149	\$664	\$674	\$10
<b>TOTAL Inland Oil Spill Programs</b>	<b>\$19,601</b>	<b>\$20,098</b>	<b>\$26,502</b>	<b>\$6,404</b>

## **Compliance**

## Compliance Monitoring

Program Area: Compliance

Goal: Enforce Environmental Laws and Ensure Compliance

Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	<b>FY 2021 Final Actuals</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 President's Budget</b>	<b>FY 2023 President's Budget v. FY 2022 Annualized CR</b>
Environmental Programs & Management	\$97,583	\$102,500	\$144,770	\$42,270
<b><i>Inland Oil Spill Programs</i></b>	<b><i>\$132</i></b>	<b><i>\$139</i></b>	<b><i>\$2,146</i></b>	<b><i>\$2,007</i></b>
Hazardous Substance Superfund	\$1,778	\$1,000	\$1,015	\$15
Total Budget Authority	\$99,493	\$103,639	\$147,931	\$44,292
Total Workyears	439.1	453.9	463.4	9.5

### Program Project Description:

The Compliance Monitoring Program is a component of EPA's Enforcement and Compliance Assurance Program that allows the Agency to detect noncompliance and promotes compliance with the Nation's environmental laws. Under this program, EPA integrates the data from the Facility Response Plans (FRP) and Spill Prevention, Control, and Countermeasure (SPCC) systems into EPA's Integrated Compliance Information System (ICIS). Data related to compliance with FRP and SPCC requirements is made available to the public through EPA's Enforcement and Compliance History Online (ECHO) website.

### FY 2023 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, the Agency requests an additional \$2.0 million to continue accelerating efforts to modernize ICIS and support better integration with ECHO. The increased resources will fund adjustments to ICIS and ECHO that will facilitate better access of compliance data and community information (e.g., from EPA's EJSCREEN tool) to EPA and states and to the public. This modernization will enhance EPA's efforts to address compliance concerns in overburdened or vulnerable communities.

### Performance Measure Targets:

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):**

- (+\$6.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2,001.0) This increase will allow EPA to accelerate its efforts to modernize ICIS and support better integration with ECHO and enhance efforts to address compliance concerns in overburdened and vulnerable communities.

**Statutory Authority:**

Oil Pollution Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA’s organic statute).

## **Enforcement**

## **Civil Enforcement**

Program Area: Enforcement

Goal: Enforce Environmental Laws and Ensure Compliance

Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	<b>FY 2021 Final Actuals</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 President's Budget</b>	<b>FY 2023 President's Budget v. FY 2022 Annualized CR</b>
Environmental Programs & Management	\$164,888	\$168,341	\$210,011	\$41,670
Leaking Underground Storage Tanks	\$625	\$620	\$653	\$33
<b><i>Inland Oil Spill Programs</i></b>	<b>\$2,532</b>	<b>\$2,413</b>	<b>\$2,538</b>	<b>\$125</b>
Total Budget Authority	\$168,045	\$171,374	\$213,202	\$41,828
Total Workyears	908.0	916.2	1,004.2	88.0

### **Program Project Description:**

The Civil Enforcement Program's goal is to protect human health and the environment by ensuring compliance with the Nation's environmental laws. The Civil Enforcement Program collaborates with the U.S. Department of Justice, states, local, and tribal governments to ensure consistent and fair enforcement of environmental laws and regulations. The Civil Enforcement Program develops, litigates, and settles administrative and civil judicial cases against violators of environmental laws.

The Civil Enforcement Program's enforcement of Section 311 of the Clean Water Act, as amended by the Oil Pollution Act of 1990, is designed to ensure compliance with the prohibition against oil and hazardous substance spills that violate the statute, as well as the oil spill prevention, response planning, and other regulatory requirements. The Civil Enforcement Program develops policies, issues administrative compliance and penalty orders, and refers civil judicial actions to the Department of Justice to address spills, violations of spill prevention regulations, response planning regulations and other violations (*e.g.*, improper dispersant use or noncompliance with orders). The Program also will assist in the recovery of cleanup costs expended by the government and provides support for field investigations of spills, Facility Response Plan, Spill Prevention, Control, and Countermeasure, and other requirements.

### **FY 2023 Activities and Performance Plan:**

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, EPA will continue to streamline the Civil Enforcement Program, prioritize resources to achieve regulatory compliance, and address oil or hazardous substance spills in violation of the statute and deter future spills. The Agency will focus on facilities where enforcement will promote deterrence, tackle the climate crisis, integrate environmental justice considerations in our work to protect overburdened and underserved communities that have borne a disproportionate burden of pollution, and ensure that spills are prevented, cleaned up, and, where appropriate, mitigated. The

Civil Enforcement Program also will continue to coordinate with the Criminal Enforcement Program, as appropriate.

**Performance Measure Targets:**

Work under this program supports performance results in the Civil Enforcement Program under the EPM appropriation.

**FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):**

- (+\$102.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$23.0) This program increase will support EPA's efforts to achieve regulatory compliance and address oil or hazardous substance spills in violation of statute.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Clean Water Act; Oil Pollution Act.

**Oil**

## Oil Spill: Prevention, Preparedness and Response

Program Area: Oil

Goal: Safeguard and Revitalize Communities

Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
<b><i>Inland Oil Spill Programs</i></b>	<b><i>\$15,160</i></b>	<b><i>\$16,200</i></b>	<b><i>\$20,503</i></b>	<b><i>\$4,303</i></b>
Total Budget Authority	\$15,160	\$16,200	\$20,503	\$4,303
Total Workyears	64.8	70.6	85.6	15.0

### Program Project Description:

The Oil Spill Prevention, Preparedness and Response Program protects the American people by preventing, preparing for, responding to, and monitoring inland oil spills. EPA is the lead federal responder for inland oil spills, including transportation-related spills from pipelines, trucks, railcars, and other transportation systems. In addition, the Program may provide technical assistance, assets, and outreach to industry, states, and local communities as part of the Agency's effort to prevent, prepare for, and respond to oil incidents.<sup>1</sup>

There are approximately 550,000 Spill Prevention, Control, and Countermeasure (SPCC) facilities, including a subset of 3,840 Facility Response Plan (FRP) facilities identified as high risk due to their size and location. The Oil Pollution Act requires certain facilities that store and use oil to prepare response plans that are reviewed by EPA to ensure availability of response resources in the event of a discharge to navigable waters or adjoining shorelines.

To minimize the potential impacts to human health and the environment, the Agency targets inspections at facilities that pose the highest risk. Inspections are essential to ensuring that facility staff is knowledgeable about prevention and response plans, and quickly able to put these plans into action. The Agency currently inspects approximately 0.12 percent of SPCC facilities per year. In FY 2021, EPA found percent 91 of SPCC facilities inspected to be out of compliance at the time of inspection.<sup>2</sup> In FY 2021, EPA continued off-site compliance monitoring activities for 98 SPCC and 250 FRP facilities to further expand the compliance evaluation tools available to inspectors during the COVID-19 pandemic.<sup>3</sup> EPA plans to continue to use off-site compliance monitoring to complement on-site inspections during FY 2023 and future years.<sup>4</sup>

<sup>1</sup> For more information, please refer to: <https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations>.

<sup>2</sup> Information from the EPA Oil database.

<sup>3</sup> In FY 2021, the Agency conducted 348 offsite compliance monitoring activities for SPCC and FRP.

<sup>4</sup> For more information, please refer to: [https://www.epa.gov/sites/production/files/2020-07/documents/inspectioncommitments\\_0.pdf](https://www.epa.gov/sites/production/files/2020-07/documents/inspectioncommitments_0.pdf).

EPA receives spill notifications through the National Response Center. The Agency is responsible for ensuring all inland oil spills are promptly responded to, working closely with state and local first responders on smaller spills and leading the response on larger spills. EPA accesses the Oil Spill Liability Trust Fund, administered by the U.S. Coast Guard, to obtain reimbursement funds for site specific oil spill response activities.

### **FY 2023 Activities and Performance Plan:**

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, the Oil Spill Prevention, Preparedness and Response Program will:

- Inspect oil facilities to ensure compliance with prevention and preparedness requirements. Inspections involve reviewing the facility's prevention, preparedness, and response plans and discussing key aspects of these plans with facility staff. EPA also will conduct unannounced exercises at FRP facilities to test the facility owner/operator's ability to put preparedness and response plans into action. Finally, EPA will conduct off-site compliance monitoring activities for oil facilities to allow inspectors to determine compliance from remote locations as another tool to promote regulatory compliance. EPA will focus inspections at high-risk facilities. Using the additional funding and FTE requested for FY 2023, the Program will increase inspections and compliance assistance at SPCC and FRP-regulated facilities, focusing on high-risk facilities located in communities with environmental justice concerns and communities with increased climate-related risks (e.g., extreme weather, flooding, wildfires, etc.). At a minimum, the Program expects to conduct an additional 150 inspections at SPCC and FRP-regulated facilities. The Program will develop additional compliance assistance materials, such as factsheets and facility guidance, reflecting the potential impacts of climate change and environmental justice.
- Maintain the National Contingency Plan's Subpart J product schedule, which identifies a list of products that may be used to mitigate oil spills.
- Target exercises to improve preparedness for communities with environmental justice concerns and increase incorporation of environmental justice into preparedness activities overall.
- Maintain the National Oil Database, which compiles data for the Program. The database assists in managing SPCC and FRP information obtained during inspections as well as serving as a historical repository. The Oil Database provides more efficient access to regulated facility information to streamline inspection activities and to identify regulatory applicability. Using the additional funding and FTE requested for FY 2023, EPA will continue upgrades to the National Oil Database to allow easier data entry, retrieval, and analysis in order to improve program implementation.
- Deliver required annual oil spill inspector training to federal inspectors and provide outreach to federal/state partners and industry stakeholders to improve compliance with

regulatory requirements. Using the additional funding and FTE requested for FY 2023, EPA also will develop inspector training materials and methods for inspectors to best assess SPCC and FRP facilities' incorporation of risks from natural hazards and climate change into their oil spill prevention and response plans.

- Under the Clean Water Act (CWA) authority, Subpart J of the National Contingency Plan (NCP) sets forth regulatory requirements for the use of chemical agents as an oil spill mitigation technology. In 2015, the Agency proposed amendments to Subpart J of the NCP that included revisions to the existing product listing, testing protocols, and authorization of use procedures, as well as new provisions for dispersant monitoring. EPA received a lawsuit notification in January 2020, for which the Court ultimately ruled in August 2021 that EPA must take final action by May 31, 2023. EPA finalized dispersant monitoring provisions in July 2021. In accordance with the Court ruling, the Agency will work to publish a final action for the remaining provisions by the ordered date, also addressing Administration priorities on environmental justice and climate change.

### **Performance Measure Targets:**

Work under this program directly supports performance results in the Superfund: EPA Emergency Preparedness program under the Superfund appropriation.

### **FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):**

- (+\$504.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$3,799.0 / +15.0 FTE) This program change is an increase to support Oil Spill Prevention, Preparedness, and Response activities in fenceline communities at risk from nearby oil facilities, including providing increased outreach/compliance assistance, improved inspector training, Oil Database improvements, regulatory updates, and inspections at regulated facilities to ensure facilities have measures in place to prevent oil accidents. In addition, resources will be used to develop inspector training materials and methods. This investment includes \$2.609 million in payroll.

### **Statutory Authority:**

The Clean Water Act Section 311 as amended by the Oil Pollution Act.

## **Operations and Administration**

## Facilities Infrastructure and Operations

Program Area: Operations and Administration  
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	<b>FY 2021 Final Actuals</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 President's Budget</b>	<b>FY 2023 President's Budget v. FY 2022 Annualized CR</b>
Environmental Programs & Management	\$257,524	\$285,441	\$288,293	\$2,852
Science & Technology	\$65,093	\$67,500	\$68,912	\$1,412
Building and Facilities	\$36,071	\$27,076	\$73,894	\$46,818
Leaking Underground Storage Tanks	\$932	\$836	\$724	-\$112
<b><i>Inland Oil Spill Programs</i></b>	<b><i>\$628</i></b>	<b><i>\$682</i></b>	<b><i>\$641</i></b>	<b><i>-\$41</i></b>
Hazardous Substance Superfund	\$81,976	\$68,727	\$71,219	\$2,492
Total Budget Authority	\$442,223	\$450,262	\$503,683	\$53,421
Total Workyears	334.2	315.4	325.4	10.0

Total workyears in FY 2023 include 5.4 FTE to support Facilities, Infrastructure and Operations working capital fund (WCF) services.

### **Program Project Description:**

EPA's Facilities Infrastructure and Operations Program in the Inland Oil Spill Programs appropriation supports the Agency's rent, transit subsidy, and facility operations. Funding is allocated for such services among the major appropriations for the Agency.

### **FY 2023 Activities and Performance Plan:**

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2023, EPA will continue to take aggressive action to reconfigure EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility resiliency and sustainability to combat the effects of climate change and ensure a space footprint that accommodates a growing workforce. For FY 2023, EPA is requesting \$483 thousand for rent in the Inland Oil Spill Programs appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level. EPA also will continue working to increase sustainability and reduce carbon emissions through cost-effective solutions.

### **Performance Measure Targets:**

EPA's FY 2023 Annual Performance Plan does not include annual performance goals specific to this program.

**FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):**

- (-\$41.0) This change to fixed and other costs is a decrease due to the recalculation of rent and transit subsidy needs.

**Statutory Authority:**

Federal Property and Administration Services Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

## **Research: Sustainable Communities**

## Research: Sustainable and Healthy Communities

Program Area: Research: Sustainable Communities  
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2021 Final Actuals	FY 2022 Annualized CR	FY 2023 President's Budget	FY 2023 President's Budget v. FY 2022 Annualized CR
Science & Technology	\$112,717	\$133,000	\$141,477	\$8,477
Leaking Underground Storage Tanks	\$303	\$320	\$337	\$17
<b><i>Inland Oil Spill Programs</i></b>	<b><i>\$1,149</i></b>	<b><i>\$664</i></b>	<b><i>\$674</i></b>	<b><i>\$10</i></b>
Hazardous Substance Superfund	\$13,458	\$16,463	\$16,927	\$464
Total Budget Authority	\$127,626	\$150,447	\$159,415	\$8,968
Total Workyears	442.3	421.8	441.8	20.0

### Program Project Description:

EPA is the lead federal on-scene coordinator for inland oil spills and provides technical assistance, when needed, for coastal spills.<sup>4</sup> EPA is responsible for oil spill preparedness, response, and associated research, as well as having the lead role to develop protocols for testing spill response products and agents, which is planned with the assistance of partner agencies including, the United States Coast Guard, United States Department of the Interior, United States Department of Transportation, and United States Department of Commerce.

EPA's Sustainable and Healthy Communities (SHC) Research Program for inland oil spills, funded through the Oil Spill Liability Trust Fund,<sup>5</sup> provides federal, tribal, state, and community decision-makers with analysis and tools to protect human and ecosystem health from the negative impacts of oil spills. EPA assists communities, including economically, socially, and environmentally disadvantaged or impacted communities, by supporting local officials in their response to a spill. As a result of EPA's research, responders can make more informed decisions on approaches and methods to reduce the spread and impact of coastal and inland oil spills, including pipeline and railway spills. Additionally, EPA's remediation expertise is critical in addressing potential impacts to communities and their environmental resources associated with pipeline and railway oil spills.

In support of these response efforts, EPA conducts research related to the Agency's National Contingency Plan (NCP) Product Schedule.<sup>6</sup> The NCP is used nationwide by emergency responders and federal agencies in responding to oil spills. EPA's role is to develop and evaluate response approaches involving bioremediation, dispersants, and other additives. EPA also assesses impacts to surface water and groundwater, especially if they affect drinking water

<sup>4</sup> For more information, please see: <https://www.epa.gov/emergency-response/epas-scene-coordinators-oscsc>.

<sup>5</sup> For more information, please see: [https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/About\\_NPFC/OSLTF/](https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/About_NPFC/OSLTF/).

<sup>6</sup> For more information, please see: <http://www2.epa.gov/emergency-response/national-contingency-plan-subpart-j>.

supplies. The Agency relies on this research to provide testing procedures that inform cleanup decisions during an emergency spill response.

#### Recent Accomplishments of the SHC Research Program include:<sup>7</sup>

Toxicity of sediment oiled with diluted bitumens to freshwater and estuarine species: EPA researchers advanced EPA's and the nation's capabilities to respond to oil spills through 1) the development of a conceptual framework for an integrated oil spill model for societal level questions;<sup>8</sup> 2) evaluating in situ burning efficiencies for oil slicks on water;<sup>9</sup> 3) developing autonomous and remotely operated underwater vehicles for detecting submerged and dispersed oil;<sup>10</sup> and 4) assessing the impact of salinity on the effectiveness of chemical dispersants.<sup>11</sup> The 2010 Deepwater Horizon oil spill resulted in an unprecedented amount of scientific data on the fate and impact of spilled oil in the ocean. EPA researchers published a paper presenting a framework based on four knowledge domains: ocean environment, biological ecosystems, socioeconomics, and human health.<sup>8</sup> A causal loop diagram was developed to evaluate linkages and data gaps, with largest knowledge gaps corresponding to the socioeconomics and human health domains. This research has prepared the Agency to understand human and environmental impacts of spilled oil in coastal waters and improves Agency preparedness for emergency response operations and the use of NCP Product Schedule treating agents.

#### **FY 2023 Activities and Performance Plan:**

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

In FY 2023, the oil spill program will conduct research to support regulatory activities and protocol development for EPA's programs and to support state-delegated programs. This Program will provide on-demand technical support at federal, tribal, or state-managed cleanup sites, as well as assistance during emergencies. The Program will continue to conduct health, environmental engineering, and ecological research, and prepare planning and analysis tools for localities nationwide that will facilitate regulatory compliance and improve environmental and health outcomes.

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<sup>7</sup> For a more complete view of accomplishments, please see: <https://www.epa.gov/research/national-research-programs>.

<sup>8</sup> Solo-Gabriele, H.M., T. Fiddaman, C. Mauritzen, C. Ainsworth, D. Abramson, I. Berenshtein, E.P. Chassignet, S.S. Chen, R.N. Conmy, J.W. Farrington, M. Feldman, D. French-McCay, K. Lee, Y. Liu, S.A. Murawski, C. Paris-Limouzy, A. Quigg, C. Wilson et al. (2021) Towards Integrated Modeling of the Long-term Impacts of Oil Spills. *Marine Policy*, 131: 104554. <https://doi.org/10.1016/j.marpol.2021.104554>

<sup>9</sup> Gullett, B., J. Aurell, A. Holder, R.N. Conmy, D. Sundaravadivelu, N. Lamie, K. Stone, E. Holder (2021) Characterization of emissions and residues from measures to improve efficiency of in situ oil burns. *International Oil Spill Conference Proceedings: Vol. 2021, No. 1.* <https://doi.org/10.7901/2169-3358-2021.1.1141223>

<sup>10</sup> Conmy, R.N., L. DiPinto, A. Kukulya, O. Garcia, D. Sundaravadivelu, M. Gloekler, A. Hall, E. Fischell, D. Gomez-Ibanez (2021) Advances in underwater oil plume detection capabilities. *International Oil Spill Conference Proceedings: Vol. 2021, No. 1.* <https://doi.org/10.7901/2169-3358-2021.1.1141330>

<sup>11</sup> Conmy, R.N., D. Sundaravadivelu, B.A. Schaeffer, B. Robinson, T. King, R. Grosser, E. Holder (2021) Characterizing dispersion effectiveness at varying salinities. *International Oil Spill Conference Proceedings: Vol. 2021, No. 1.* <https://doi.org/10.7901/2169-3358-2021.1.1141274>

Specific activities in FY 2023 include:

- Evaluating the toxicity of high-latitude crude oil treated with dispersants, surface washing agents and chemical herding agents. New knowledge from this research helps the oil spill response by providing more reliable standardized toxicity testing results for oil and spill response agents in an aquatic environment.
- Conducting research to better understand the aerobic biodegradation of petroleum oils treated with chemical herders and Surface Washing Agents (SWAs). This research is critical because 1) chemical herders are agents that remain in the environment after application; and 2) SWAs are the most used agents on the NCP Product Schedule. Thus, understanding the long-term fate of these agents is essential.

### **Research Planning:**

EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active collaboration and involvement. Each research program is in the process of developing the fourth generation of the StRAPs, which will continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its partners.

The Office of Research and Development (ORD) works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)  
ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.
- State Engagement
  - EPA's state engagement<sup>12</sup> is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.
- Tribal Partnerships
  - Key tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between tribal and Agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

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<sup>12</sup> For more information, please see: <https://www.epa.gov/research/epa-research-solutions-states>.

**Performance Measure Targets:**

Work under this program supports performance results in the Research: Sustainable and Healthy Communities Program under the S&T appropriation.

**FY 2023 Change from FY 2022 Annualized Continuing Resolution (Dollars in Thousands):**

- (+\$8.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.
- (+\$2.0) This program change is an increase to the Sustainable and Healthy Communities Oil Spills research program, focusing on adding to research capacity to support regulatory activities and protocol development for EPA's programs and in support of state-delegated programs.

**Statutory Authority:**

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5 App.) (EPA's organic statute); Oil Pollution Act.